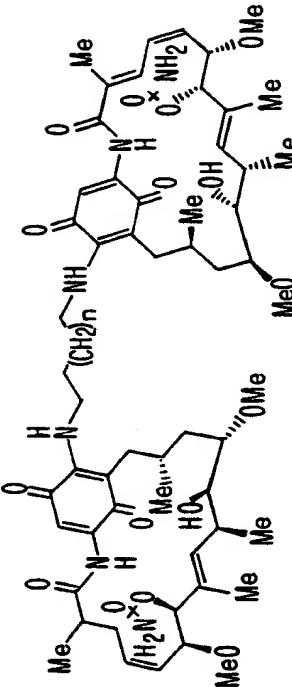


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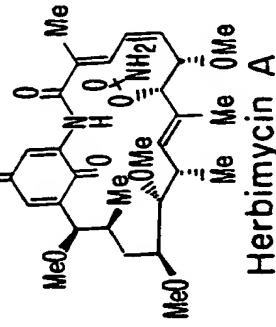
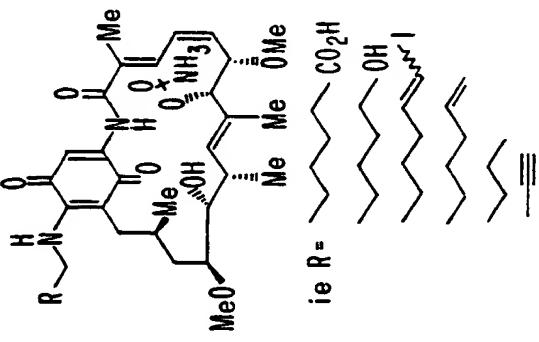
FIG. 1



Diamine (0.49 eq)  
DMSO, dark, 2-24 hrs  
Yields >80 %

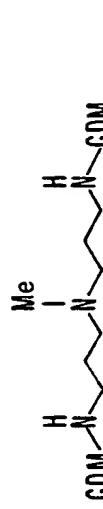
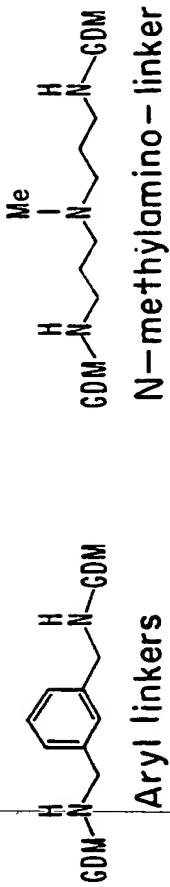
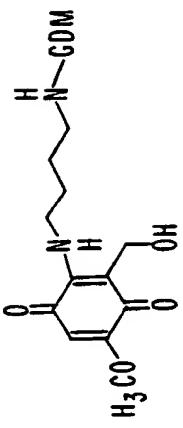
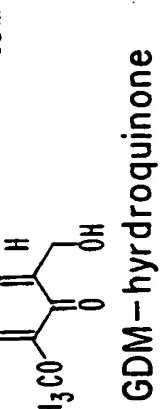
Geldanamycin (GDM)

RNH<sub>2</sub> (excess)  
CHCl<sub>3</sub>, dark



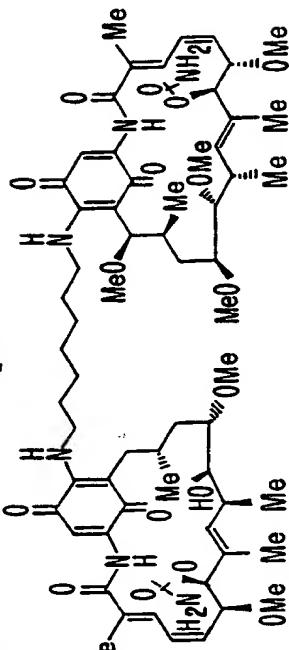
GDM  
1) H<sub>2</sub>N(CH<sub>2</sub>)NH<sub>2</sub>, CHCl<sub>3</sub>  
2) CHCl<sub>3</sub>, Heat, 2 hrs

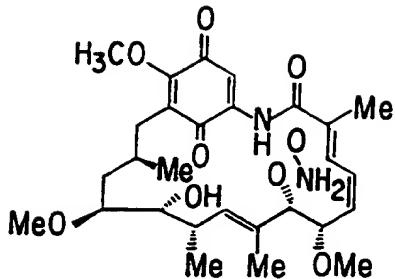
Geldanamycin Four Carbon  
Dimer-Semi-Ansa-Ring Cleaved



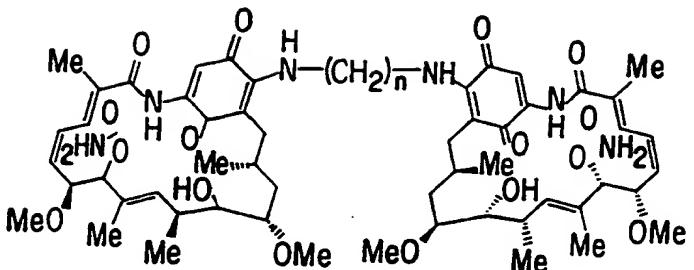
Dimers: n = 1-9

Geldanamycin-Herbimycin Heterodimer





### Geldanamycin (GM, O)



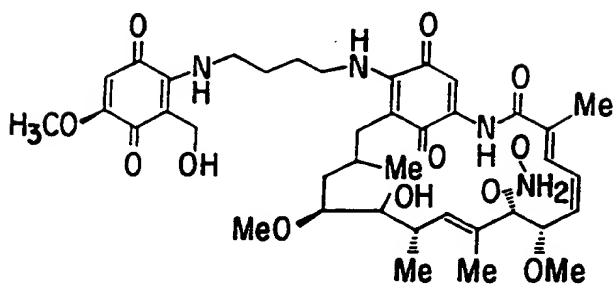
### GM dimers (GMD, O—O)

(n=4: GMD-4c,  $\frac{4}{\pi}$ 0;

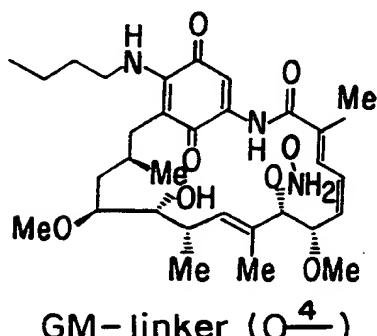
n=7: GMD-7c, 0-0;

n=9: GMD-9c,  $\frac{9}{0-0}$

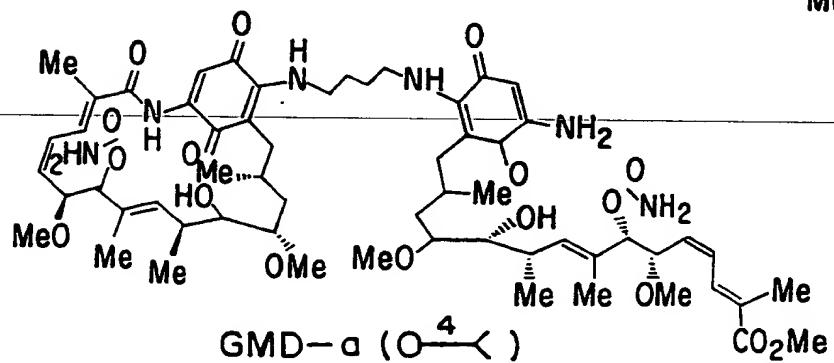
n=12: GMD-12c, 0<sup>12</sup>-0



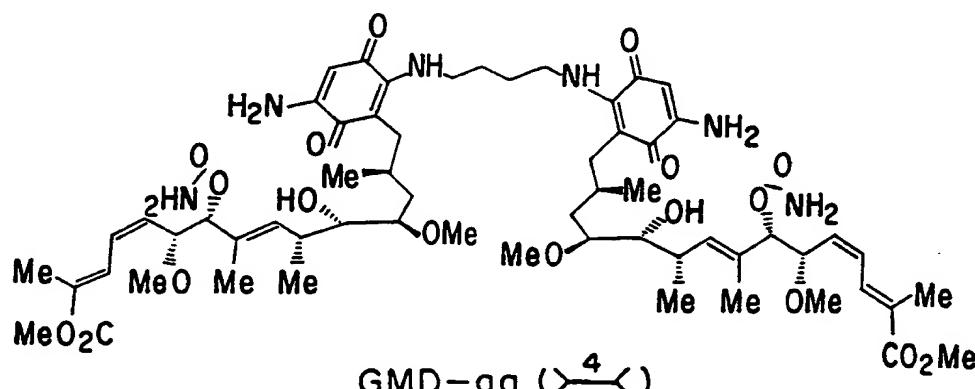
GM-quinone ( $O^4-\square$ )



## GM-linker ( $O^4$ )



GMD-a (O<sup>4</sup>)



**FIG 2**  
**SUBSTITUTE SHEET (RULE 26)**

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PCT/US00/09512

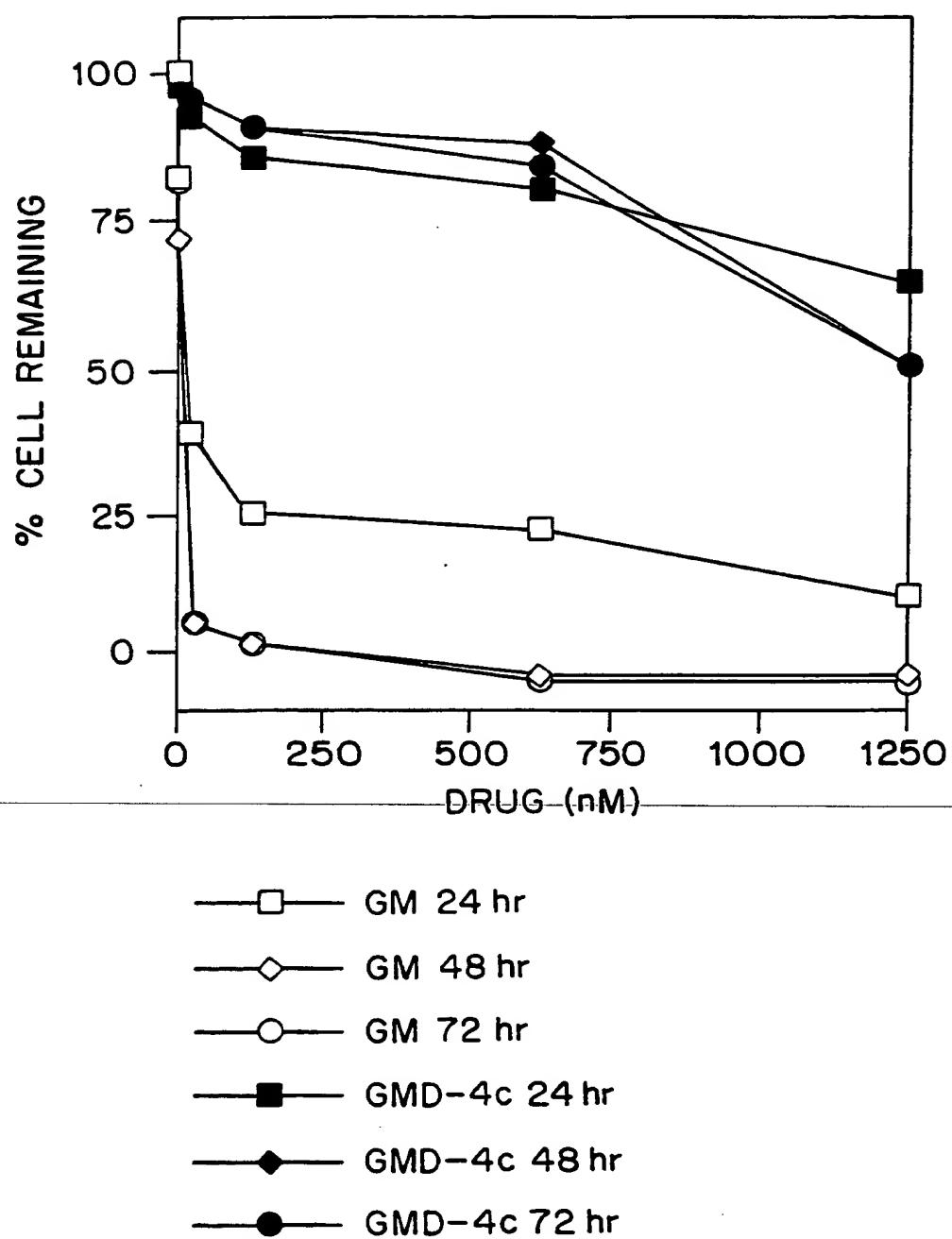
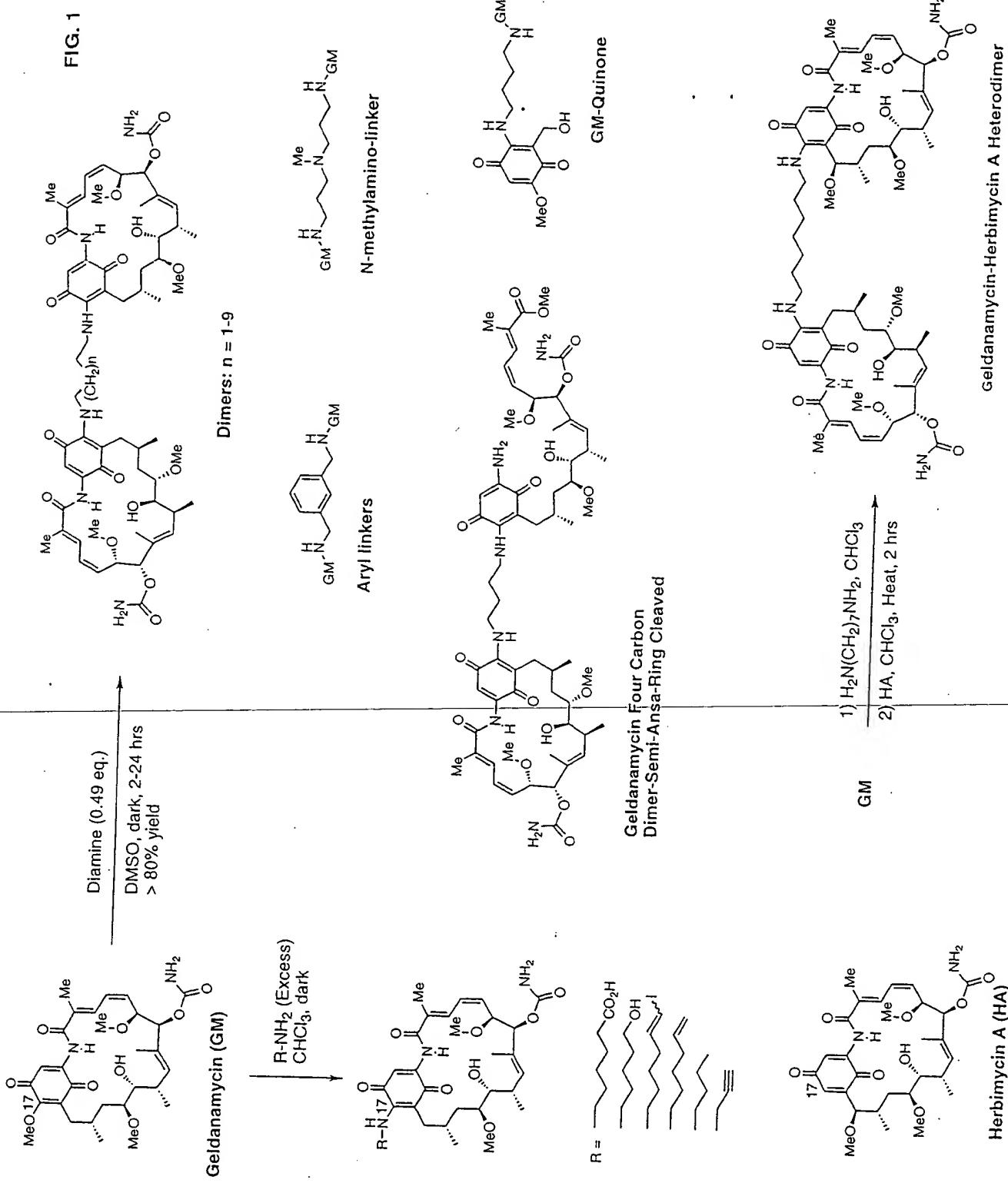
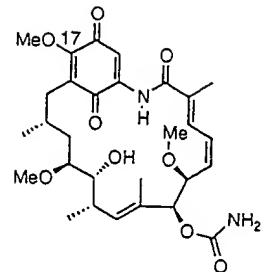
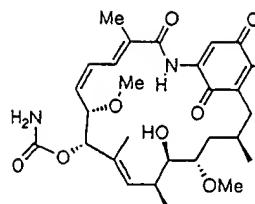


FIG. 3





Geldanamycin (GM, O)



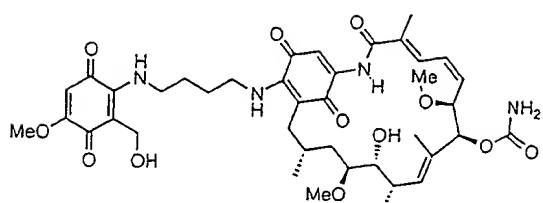
GM dimers (GMD, O---O)

$n = 4$ : GMD-4C, O<sub>4</sub>

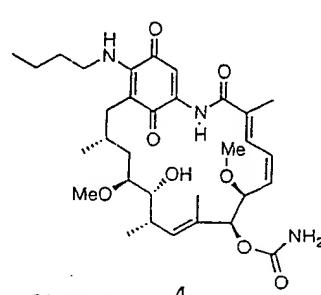
$n = 7$ : GMD-7C, O<sub>7</sub>

$n = 9$ : GMD-9C, O<sub>9</sub>

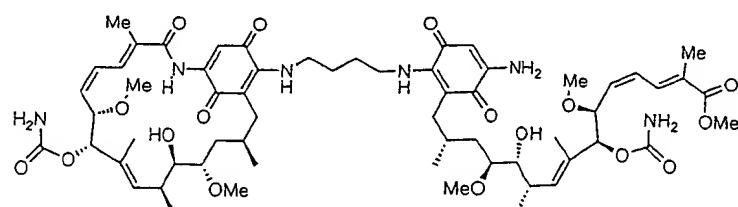
$n = 12$ : GMD-12C, O<sub>12</sub>



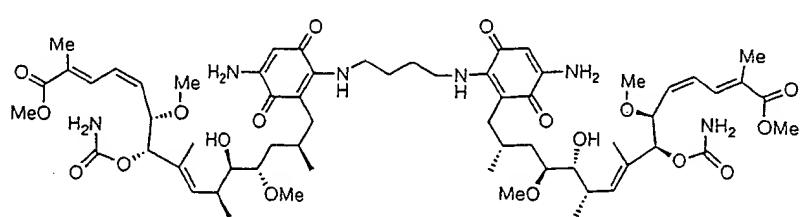
GM-Quinone, O<sub>4</sub>



GM-linker, O<sub>4</sub>



GMD-a, O<sub>4</sub>



GMD-aa, ><sub>4</sub>

Fig. 2